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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,355	07/27/2001	Matthew Howle	A148 1571	7567

7590

09/24/2002

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EXAMINER

FORTUNA, JOSE A

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 09/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,355

Applicant(s)

Howie et al.

Examiner

José A. Fortuna

Art Unit

1731



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 28, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above, claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1731

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: page 7, line 6 refers to a US Patent application; however the serial number is missing.

Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Column.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was

Art Unit: 1731

commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 8-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finlayson et al, WO 98/03731 in view of Allen et al., WO 99/05361, both supplied in Information Disclosure Statement of paper no. 4.

Finlayson et al. teach internally sizing paper with a polymer of an ethylenically unsaturated hydrocarbon and an ethylenically unsaturated carboxylic acid, see abstract. Finlayson et al. teach same monomers as the claimed , alkyl halide having at least double bond and an alkene, latex, see pages 7-8. In those pages they teach vinyl halides, page 7, line 34 and ethylene, page 7, line 21. Finlayson et al. teach also the use of retention aids such as polyamidoamines epichlorohydrin resins, Kymene® 557. In page 14, lines 7-16, Finlayson et al. teach that wet and/or dry strength additives could be used. Finlayson et al. fail to teach the anionic polymer as claimed. However, Allen et al. teach a dry strength additive including a cationic component, such as Kymene and an anionic component such as CMC, polyacrylamides, etc. Allen et al. teach that the dry strength system may be also used in paper containing: a retention aid, page 2, lines 4-10; highly cationic material for charge control or fine particle retention, lines 11-15; can be used with other additives, such as sizes, defoamer, wetting agents, etc., lines 16-17; has utility in many type of papers, lines

Art Unit: 1731

18-22; may comprise a wet strength agent, such as Kymene® 557H, page 20, lines 14-30.

Therefore, using the dry strength agent taught by Allen et al. as the dry strength agent as suggested by Finlayson et al. would have been obvious to one of ordinary skill in the art. One of ordinary skill in the art would have reasonable expectation of success if the dry strength agent taught by Allen et al. is used as the dry strength agent suggested by Finlayson et al.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Paper enhancements."


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to José Fortuna, whose telephone number is (703)305-7498. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (703)308-1164. The fax number for this group is (703)305-7115.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0661.

When filing a FAX in group 1730, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

José A. Fortuna
September 18, 2002


JOSÉ FORTUNA
PRIMARY EXAMINER
ART UNIT 1731